

IN THE SPECIFICATION

Please amend the paragraph at page 12, line 26 through page 14, last line, as follows:

An optical disk (information recording medium 9) has a physical sector area 9a and management area 9b. The management area 9b records management information. Data recorded in the physical sector area 9a will be described below. AV information or stream information, which is transferred continuously, is broken up into small pieces, which are converted into pack structures appended with pack headers, and these packs are recorded on a plurality of physical sector areas 9a assured on the optical disk. More specifically, as shown in (a) of FIG. 1, video information and audio information are transferred while being arranged along the time axis in the form of video packs 1-0 to 1-3, and audio packs 2-0 and 2-1. Each of the video packs 1-0 to 1-3 and audio packs 2-0 and 2-1 has a data size of 2048 bytes, which matches the logical sector information size. The video packs 1-0 to 1-3 and audio packs 2-0 and 2-1 are abstractly handled as a plurality of pieces of logical sector information [[3-1]] 3-0 to 3-31 in the logical layer, as shown in (b) of FIG. 1 (that is, examples of practical contents of the plurality of pieces of logical sector information [[3-1]] 3-0 to 3-31 correspond to video packs 1-0 to 1-3 and audio packs 2-0 and 2-1). In method 1, since physical sector information and logical sector information match, these pieces of information are handled as a plurality of pieces of physical sector information 4-0 to 4-31, as shown in (c) of FIG. 1. As will be described in detail later, each item of physical sector information (4-0 to 4-31) has the following configuration. That is, 4-byte PID information, 2-byte IED information, and a 10-byte reserve field (the size in an existing DVD is 6 bytes) are arranged at the head of each information, and a 4 byte EDC is arranged at the end of information (data 0-0-0 to data 0-0-5). After that, that sequence is broken up into 188-byte data (each of the data 0-0-0 to data 0-0-5), error correction PI (inner-code parity) data (PI0-0-0 to PI0-0-5) is appended to every 188-byte data, and this data is arranged in turn, as shown

in (d) of FIG. 1. In odd-numbered physical sector data (physical sector data 5-0), PO (outer-code parity) data (PO0) is arranged at the end of data to complete physical sector data [[6-0]]
5.0. The present invention is characterized in that even-numbered physical sector data (physical sector data 5-1) has a structure in which PO data (PO1) is arranged in the second column from the end of data, and data 1-1-5 and PI data (PI1 1-5) are arranged at the end of the even-numbered physical sector data (as will be described in detail later). Physical sector data 5-0 to 5-31, which is completed in this manner, is recorded on the physical sector areas 9a on the optical disk (information recording medium 9) in accordance with the order it is arranged, as shown in (e) of FIG. 1. One physical sector data item is recorded on one physical sector area 9a.